

USE OF NEW FAST-SETTING MORTARS FOR PREPARING PRODUCTS BY
MEANS OF POURING IN FOUNDRY EARTH MOULDS

ABSTRACT

Described herein is the use of new cementitious mortars with
5 a high degree of fluidity and short consolidation times in
the production of cementitious products by means of pouring
in foundry moulds. The mortars used contain water, a fast-
setting cement, fluidifiers and/or superfluidifiers, setting
regulators, and aggregates having a specific granulometric
10 distribution. The aggregates are made up of two fractions
with different grain size such that the ratio between the
characteristic grain diameters of the two fractions is
comprised between 2.2 and 3.2. The new mortars thus obtained
have values of fluidity 2-3 times higher than those of
15 mortars produced with traditional aggregates. The mortars
thus produced are particularly suitable for filling, in a
homogeneous way and without any application of vibration,
foundry earth moulds; solidification in the moulds takes
place in a short time and leads to the formation of products,
20 including ones of a complex shape, with precise outlines and
having good mechanical characteristics.